



## What do Oscar the Grouch and the state of Kansas have in common?

### Digging through trash!

You might wonder why anyone would want to dig through trash. There is only one reason—to find out what's really in there! The only way to know what is in a pile of trash is to sort through it and put the things in groups. Then, you can see how much of certain things people are throwing away. This process is called a "waste sort," and the state of Kansas is conducting one right now to find out what Kansans are throwing away.

Last year, the state of Kansas hired a company to conduct waste sorts in the fall, winter, spring, and summer at five different solid waste (trash) facilities in Kansas. The facilities included both landfills and places called transfer stations where local trucks haul their trash. At the transfer station, many small loads of trash are put together in one big truck and taken to a landfill for



disposal. The places picked for the waste sorts include Rooks County Landfill near Stockton, Rolling Meadows Landfill in Shawnee County (near Topeka), Anderson County Transfer Station in Garnett, Wilson County Transfer Station in southeast Kansas, and Finney County Landfill in Garden City.

When we understand what we throw away, we can look at our current recycling programs to see how well they are working and how to improve them in the future. During a waste sort, we can find out whether we are throwing away stuff that could be recycled!

The company begins each waste sort by asking the people who work at the landfill or transfer station what kinds of trash will be coming in that week. Next, the company's crew sets up their equipment a safe distance away from the heavy machinery used at the landfill or transfer station. Then, sample piles of trash are taken from the trucks as they come in. A normal sample pile of trash is about 10 percent of a truck load, or about 220 pounds!

The sample pile is sorted by hand into containers for 18 kinds of trash, including five types of paper, four types of plastic, and other types of trash such as metals, yard waste, wood, and food. When the

containers fill up, the crew members place the full containers on a scale and write down how much it weighs. Some containers are filled several times from a single sample pile of trash! Once the whole sample pile of trash is sorted and weighed, all the trash from the containers is sent to the landfill for disposal.

Since this project began almost a year ago, the crews have sorted and weighed more than 93,000 pounds of trash, or more than 46 tons! Even Oscar the Grouch would be impressed! When the company has finished with the waste sorts, they will take the information they have gathered and prepare a report about what they found in Kansans' trash. Then, the state will provide the information to all of the counties in Kansas to help them improve their recycling programs.

If you or your class would like more information about the waste sorts, contact Kristi Wilson at the Bureau of Waste Management at 785-296-1026 or [kwilson@kdhe.state.ks.us](mailto:kwilson@kdhe.state.ks.us).





# BATCH MATCH!

Read each story on the left and find the sentence on the right that tells what happened next. Use a ruler to connect the dots between the parts that go together.

Dad took the coffee grounds from the coffee pot. He opened the back door and went behind the garage.

Mary put the garden fork over her shoulder. She was going to turn over the compost pile.

Bill and Sarah were planting tulip bulbs. The soil they dug up did not look very rich.

Mom had loaded our old wheelbarrow with compost for her new garden. The wheelbarrow wouldn't move.

As Nathan watered the compost pile, he saw a plastic deli food container in the middle. Someone must have put it in mistakenly.

Baby Emma screamed when she saw the big worm in the compost pile. She just didn't know!

● They added three shovelfuls of compost.

● She wanted to get more oxygen into the pile.

● Worms are natural biodegraders.

● He emptied them on the compost pile.

● It had a flat tire.

● Plastic doesn't decompose in a compost pile.

Circle all the letters not covered by a line. Write the circled letters in order from top to bottom. They spell \_\_\_\_\_. What is the definition of this word? \_\_\_\_\_

# RECYCLING RAG

Unscramble the words to learn how to finish your recycling!

# MIXED MESSAGES

Instructions: Convert each fraction into a whole or mixed number. In the box below, cross off each mixed or whole number that you find. When you're done, there will be five numbers left. Read the words in those boxes from top to bottom. You'll find the message that answers the question! We've done the first one for you.

- |               |          |          |             |
|---------------|----------|----------|-------------|
| $23/6 = 35/6$ | $13/4 =$ | $24/4 =$ | $9/3 =$     |
| $8/2 =$       | $25/5 =$ | $8/3 =$  | $109/109 =$ |
| $12/11 =$     | $49/8 =$ | $15/8 =$ | $5/2 =$     |
| $8/1 =$       | $21/3 =$ | $11/2 =$ | $4/3 =$     |
| $19/6 =$      | $13/5 =$ | $17/4 =$ | $11/8 =$    |

How can you celebrate America Recycles Day?

# LIFE CYCLES

A life cycle is the sequence of changes that a person, animal, or plant passes through during its life. Even though products aren't living things, we still think of them as having "life" and thus a "life cycle." For instance, you've probably heard a grown-up say, "There's still a lot of life left in that old sofa." When we refer to the life of a product, we're commenting on its utility, function, and usefulness.

Recycling makes it possible to give resources a longer life because they are turned into new items and used again.

**Life Cycle of a Disposable Product**

**Extraction**

**Manufacture**

**Use**

**Processing**

**Disposal**

**Life Cycle of a Recyclable Product**

**Collection**

**Use**

**Remanufacture**

**Processing**

- Draw arrows at left to illustrate the life cycle of each type of product.
  - Which type of product at left has a one-way life cycle? \_\_\_\_\_
  - Which type of product at left has a continuous life cycle? \_\_\_\_\_
  - Which type of product would have a longer useful "life"? \_\_\_\_\_
  - Next to each of the products below, write "disposable" or "recyclable."
- Aluminum can \_\_\_\_\_

Plastic picnic plate \_\_\_\_\_

Newspaper \_\_\_\_\_

Steel food can \_\_\_\_\_

Broken plastic toy \_\_\_\_\_

Gum wrapper \_\_\_\_\_

Plastic (#1 PETE) drink bottle \_\_\_\_\_

reuse $3\frac{1}{4}$	renew 2	recycle $5\frac{1}{2}$	recover $6\frac{1}{8}$	reverse 4
your $4\frac{1}{3}$	my $1\frac{7}{8}$	her 5	their $3\frac{1}{6}$	his 1
way $2\frac{2}{3}$	decision 6	<del>importance <math>3\frac{5}{6}</math></del>	statement $4\frac{1}{4}$	commitment $1\frac{2}{7}$
for 3	with $1\frac{1}{11}$	to $2\frac{2}{5}$	in $2\frac{1}{2}$	at 8
composting $2\frac{3}{5}$	recycling $3\frac{4}{7}$	reusing $1\frac{3}{8}$	reducing 7	consuming $1\frac{1}{3}$



# Kansans Making a Difference

Recycling does a lot of good! Every time you recycle, you reduce pollution, save energy, conserve resources, and even help create jobs.

On November 15, people all over the state will be celebrating Kansas America Recycles Day and pledging to do more to recycle. You can, too. Here are some ideas:



- Plan an America Recycles Day event at your school or in your neighborhood. You could collect cans or plastic bottles. You might challenge other classes to see which class can recycle the most. You might create a scavenger hunt to find items made out of recycled materials. If you'd like help organizing your project, additional information, or assistance promoting your efforts, contact Keep Kansas Beautiful at [kkb@kansasbirp.com](mailto:kkb@kansasbirp.com) or 785-273-6808.
- Recycle a new item at home or collect more of what you already recycle. Find out what materials are accepted in your local recycling program. If you aren't recycling all of them, start now.
- Buy more products made out of recycled materials. When you buy these products, you help create markets for your recyclables. Look for the recycled-content symbol on products and packages when you shop. You can find recycled paper, school supplies, sports equipment, and even clothes.
- Visit a solid waste facility. Learn how recyclables are sorted and packaged at a recycling center. Watch as microbes turn yard waste into nutrient-rich compost at a composting center. Discover the different ways trash is handled and moved around the state for disposal. Or, visit a landfill to see what happens to all the stuff we don't reuse, recycle, or compost.



Remember—recycling should be a part of everyday life. When you pledge, you'll become one of the many Kansans making a difference. You'll also be entered to win some great prizes made out of recycled materials!

For details, visit [www.kansasbirp.com](http://www.kansasbirp.com) on the Internet.

Fill out and then mail to KDHE, Bureau of Waste Management • Attention: America Recycles Day • 1000 SW Jackson, Suite 320 • Topeka, KS 66612



## AMERICA RECYCLES DAY CONTEST ENTRY

### Test your Recycling Reflexes ...

- How many pounds of recycled materials does Ford use in a year? (*about 4 billion*)
- Which company collected and recycled nearly 24,000,000,000 (that's *billion*) used aluminum beverage cans in 2000? (*Alcan*)
- Name the first national solid waste & recycling company to focus on the recovery of electronic scrap. (*Waste Management*)

Please enter me in the random drawing to be held on December 16, 2002, for the Youth and Adult national prizes. One entry per person for 2002. No purchase necessary. Your name and address will be kept confidential. Entries must be received by November 22, 2002. For a complete set of rules, send a self-addressed envelope to Contest Rules, America Recycles Day, 1325 G Street NW, Suite 1025, Washington, DC 20005-3104.

Name: \_\_\_\_\_

Organization or School: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

County: \_\_\_\_\_ Daytime Phone: ( ) \_\_\_\_\_

Check here if you are under the age of 18. ☐

This information will not be sold or transferred. America Recycles Day is sponsored by:



## Kansas Clean Sweeps

This fall, the Kansas Department of Health and Environment (KDHE) has two Clean Sweep events planned to help schools and farmers get rid of hazardous chemicals safely.

First, KDHE is offering a one-time school lab chemical clean-out free of charge to all public and private high schools in the state. Many school labs are storing chemicals that could be hazardous to teachers and students. Many of these chemicals are no longer used, but disposing of them is very costly, so they stay in storage. This fall's collections will take place in north central Kansas.

KDHE also offers collection events to allow farmers and ranchers to dispose of pesticides, herbicides, and fertilizers that are damaged, unwanted, or no longer usable. Any farmer or rancher who operates in Kansas can use this free disposal program. Fall collections will be held in south central Kansas.

If you, your principal, janitor, or parents have any questions about these Kansas Clean Sweep programs, call Cathy Colglazier at KDHE at 1-800-282-9790.

## Surf over to our site

Visit the new Kansas Don't Spoil It! website at [www.kansasdontspoilit.com](http://www.kansasdontspoilit.com) or [www.dontspoilit.com](http://www.dontspoilit.com). This website has a large amount of information for everyone, including a "Community Center," a "Kids' Zone," a "Press Room," a "Teachers' Lounge," a "Center for Businesses," and a "City Hall."

At the site, you'll learn how and where to dispose of hazardous waste, how to compost, and much, much more!

For more information about the site, contact Phyllis Funk at 785-296-1480 or at [pfunk@kdhe.state.ks.us](mailto:pfunk@kdhe.state.ks.us).



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Waste Management



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